

Risk-Based Security Initiatives

J. R. Wade, CISSP



Risk-based Security Initiatives

Overview

- Background
- New Information Security Policy framework
- New Security Architecture
- New Information Security Risk Management Model
- Bringing it all together



Risk-based Security Initiatives - Background

- Legacy IT environment
 - inflexible

- inconsistent

redundant

- single risk view
- Need to make IT more cost-effective
- Responsive to national businesses
- Simplify deployment use standards
- Baseline & standardize infrastructure
- Consistent approach



The Blueprint Framework

Development Services

- Application Type & Style
- Code Management
- Language Services
- Libraries
- Project Management
- Quality Assurance & Testing
- Requirements & Modeling

Application Interface System Interface Application Business Logic Services System Integration • Authoring (Document & Multimedia • Inquiry, Analysis, & Information Data Discovery Content) Services Data Movement & File Transfer Metadata Database and Objectbase Report Creation and Distribution Document and Records Management Search • Image Capture & OCR Streaming Media Web Content Management Address and Directory • E-mail and Messaging Network Caching Fax Based Calendaring • File and Print Services Collaboration Portals and Personalization • External Business Partner & Public Connectivity - Extranet & Internet Network • LAN & Facility Backbone - Campus Access Services

Wireless

Mobile, & Telecommuter - Remote Access

WAN

Client

Server

Storage

Platform

Services

Operations Services

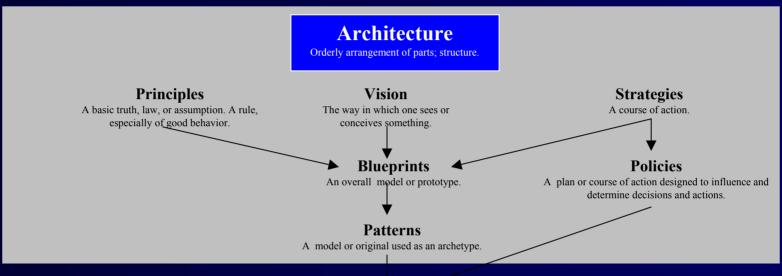
- Business
 Continuity &
 Disaster
 Recovery
- Communication
- Deployment
- Management
- Optimization

Security Services

- Authorization
- Confidentiality
- Identification and Authentication
- Integrity
- Availability
- Non-repudiation



Standards Taxonomy



Standards

Something established by authority, custom, or general consent as a rule, model, or example.

Tools

Something used in the performance of an operation, e.g., vendor products.

Forms/Templates

Style or manner of presenting ideas, concepts, and information.

Guidelines

An indication or outline of policy or conduct.

Specifications

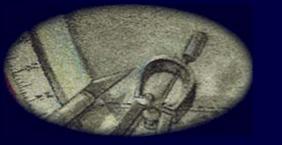
A detailed and exact statement of particulars.

Processes

A series of actions, changes, or functions that achieve an end or result.

Procedures/Instructions

Specified way to carry out an activity or a process.



Information Security Policy Framework

Principles



Management statements of intent for accessing or using information assets
- What & Why -

Technology Neutral
Adaptable
Consistent Approach

Practices

Define controls that support Principles
- When, Where, & Who

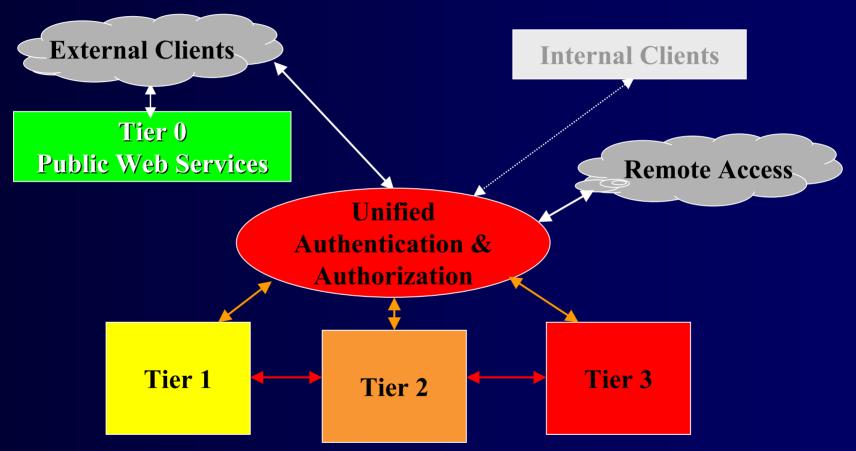
How to configure, deploy & secure a specific technology &/or process
- How -



Standards



New Security Architecture



Pre-defined environments based on risk tolerance.

Information Security Risk Management Model

Business Owner initiates the Risk Model Process

Business Owner & Team
Begin Risk Management
Process & Answer Risk
Level Scoping Questions

Technical Team
Provide system component
specifications & answer
configuration questions

Risk level and Exposure levels are calculated. Security Controls are presented

OR

Standards & Vulnerability

Databases provide Controls &
Configuration information

Security Controls
Selected

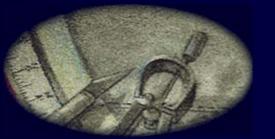
Compensating Controls or Acceptance of Risk require review & approval through the Accreditation Process

Security Controls
Not Selected Mitigation or
Acceptance of Risk

Business Owner approves the Information Security Risk Profile

Information Security
Risk Profile

Ie



Risk-based Security Initiatives - Overview

